

SPECIAL PATHOLOGY AND SPECIAL THERAPEUTICS.

27. *On the colour of matters discharged from the Bowels.* By Professor GNAVEN.
—The colour of matters discharged from the bowels is subject to very great variety. In some cases they are clay-coloured or whitish, somewhat like barm; and I have seen them still whiter, and approaching the hue of milk. It is in cases of the latter kind, where the discharges are of a milky appearance, that persons have been said to pass chyle, and their emaciation has been attributed to a deficiency of nutriment depending on this cause. This, however, is not the fact: in some cases of chronic dysentery and diarrhœa, a fluid-whitish discharge takes place from the rectum, but this is not chyle, it is only the changed mucous secretion of the irritated portion of the bowel. It is very curious to observe what different products the same set of secreting vessels will give rise to, according to the mode in which their vital action is affected.

In other cases the discharges from the bowels consist of fatty matter, which bears a strong resemblance to wax, or adipocire. Again, we may have them of a very dark, or even black, colour. I have seen the stools quite black in particular forms of dyspepsia. Some time ago I attended a gentleman at Drumcondra, who exhibited this change in the colour of the intestinal secretions to a very remarkable degree. He was a very large man, accustomed to eat and drink very heartily, having, no doubt, a very capacious stomach and bowels, and a great quantity of fluids and solids. I mention this in order to give some explanation of the enormous quantities of this black fluid which he passed by stool and vomiting. After complaining for a considerable time of dyspeptic symptoms, he got an attack of vomiting; and as he drank freely of diluents during the act of emesis, the quantity of this black fluid which he threw up was amazing; indeed, I might say, without exaggeration, that he vomited by the gallon. With this he had eructations of sulphuretted hydrogen to such an extent, that it was almost impossible to remain in the same room with him. His tongue was as black as ink, and though frequently cleansed, resumed in a short time its former hue. He also passed an enormous quantity of the same stuff by stool. This matter I ascertained, by numerous observations and experiments, to be a secretion from the mucous membrane of the bowels, and not depraved bile, or blood changed by the acid secretions of the bowels. Black stools may also depend upon the presence of other matters, as in case of melœna. Melœna consists of a discharge of grumous blood from the intestines, either with or without black matter. The following is the way in which it occurs. Blood is secreted slowly into the intestinal tube; while it remains there it is acted on by the acid secretions of the intestines, the effect of which is to change the colouring matter into a black, and in this state it is passed by stool. Again, there are other cases in which the discharges from the bowels are found of a tarry and viscid consistence, and having a greenish-black appearance: this would appear to be connected with a vitiated state of the biliary secretion.

I have spoken here of three species of black discharge, each of a different kind, and requiring to have a distinction made between them for practical purposes. Now it is said, if blood be present, you can easily recognise it by patting a portion of the discharge, inclosed in a small linen bag, into warm water, when, after remaining some time, the linen will be stained of a reddish colour. If you take a portion of the tarry discharge, and drop a little of it into water, it will communicate to it a yellowish stain. On the other hand, the black fluid, which consists of vitiated mucous secretion, will not impart either a red or yellow tinge.

I may further observe, that various subjects used medicinally communicate a particular tinge to the alvine discharges. Thus acetate of lead, when it meets with sulphuretted hydrogen in the intestines, changes the stools to a black colour. Again, many of the salts of iron have the same property. Other substances, such as logwood, bilberries, &c. impart to them a red tinge, while the continued use of chalk mixture is apt to render them whitish or of the colour of pipeclay. This is apt to give rise to suspicions of the existence of obstruction of the liver; and in one instance I was deceived for some time by it myself. With respect to the greenish-coloured discharges, they are those which are most frequently met with, particularly in children, and are therefore entitled to a greater degree of con-

sideration. There is nothing more common than to meet with cases of this green discharge during the period of infancy; and I regret to state that a great deal of error has prevailed on the subject. Greenish stools are generally looked upon as a sign that the child's liver is out of order, and as an indication for giving emolument. This, however, is by no means true: they not unfrequently depend upon irritation of the intestinal mucous membrane approaching to inflammation. The proper mode of treatment here consists in adopting measures calculated to remove irritability. In such cases, warm baths, the application of rubefacient liniments to the abdomen, the use of antacids, such as chalk mixture, the carbonates of soda and ammonia, small doses of laudanum, and hydrargyrum c. creta with Dover's powder, form the best remedies; and their operation will be very much assisted by a careful attention to diet. You will sometimes, it is true, meet with greenish discharges in adults, but then they are not so fluid as those of children, nor are they attended with the same irritability of the gastro-intestinal mucous membrane. Here the best plan of treatment is the Abernethian: blue pill at night, and a mild aperient in the morning, will be sufficient to correct the intestinal derangement, particularly if assisted by a well-regulated diet, and exercise in the open air. But in children the greenish discharge is often of a much more acute character, and more closely allied to inflammation, or rather irritation; although in some cases it may go on for a considerable time without producing any actual disorganization. It is on account of the property which calomel and other mercurials, exhibited internally, possess of causing irritation in the first instance, and if pushed farther, inflammation of the mucous membrane of the intestines, that they are also apt to produce discharges from the bowels, copious, fluid, and mixed with green mucous flocculi, resembling closely-chopped *spinage*. Sometimes the discharges consist of this green mucus nearly unmixed with any thing else, and then they appear like semi-fluid boiled spinage. Now most practitioners think that this green colour is derived from bile which the mercurial has brought down in unusually great quantities from the liver, excited to a more energetic act of secretion. It has nothing to do with the bile in many cases, but is entirely derived from the irritated membrane of the intestines. Long ago I pointed out, and was the first to point out, this fact in the Dublin Hospital Reports. It has very important practical bearings.—*Lond. Med. Gaz.*, August, 1837.

28. *Treatment of Gonorrhœa*.—M. VELPEAU considers a mixture of balsam copiva and cubebæ as the best internal remedy for gonorrhœa. The following is his formula for this mixture: R. bals. copaib. 3ij.; pulv. pip. cubebæ 3iv. to 3vj.; gum. opii. gr. ij.; to be formed into a paste with a little magnesia, and the mass divided into six parts, one to be taken morning, noon, and night. Three doses, he says, is usually sufficient to effect a cure. The discharge is usually arrested the second day; but if the remedy is stopped, the discharge will return. He therefore, generally, after the first dose, allows the patient to abstain one day from the medicine, and resumes it again the fourth day, and continues it three days; then one day's rest is again allowed, and the medicine recommenced the eighth day, and continued four days.

M. Velpeau has tried the tincture of iudine so lauded by M. Broglia, an Italian surgeon, the balsam of styrax and the tannin, and has not found any of them worthy of confidence. The same has been the result of his experiments with gunpowder mixed in brandy, a popular remedy in the French army, and with its several ingredients separately.

M. Velpeau reposes but little confidence in antiphlogistics as an inclusive method of treatment, though he considers them as often valuable and efficient auxiliaries.

Mercurial frictions M. V. considers useful when the urethra is indurated, presents nodosities, or there is reason to suspect ulcerations in this canal, but they are alone incompetent to effect a radical cure of gonorrhœa.

The successive application of small blisters to the space between the root of the scrotum and the anus, M. V. considers useful in old cases, but ought to be resorted to only as an auxiliary measure, or in certain cases.

As to resolvent frictions with iodine, &c. M. V. thinks that they will be found useful in a few cases, and as auxiliary means of treatment.

Acetate of lead in solution, wine and water, pure wine, and other astringent

injections, M. V. considers as more or less efficient in the cure of gonorrhœa. In cases of long standing M. V. asserts that a solution of sulphate of zinc, one grain in a mucilaginous decoction, to be productive of remarkable benefit. The balsam of copaiba, as an injection into the urethra, also sometimes effects a cure in five or six days. The solution of the acid nitrate of mercury, much eulogised recently as an injection, M. V. has found injurious instead of beneficial. The nitrate of silver in solution as an injection, has, on the contrary, been highly useful in old cases; but M. V. has derived most advantage from it when combined with a cathodic compression of the urethra.—*La Presse Médicale*, 18th and 25th Jan., 1837.

29. *Treatment of Tinea*.—The following method of treating tinea is recommended by Dr. SCHEIDT. A circumscribed portion of the eruption is covered with Jasser's ointment, composed as follows: R. sulphur. purificat. vitriol alb. aa ʒij; axung. recent. ʒvj; M. F. unguent. In a few days the crusts begin to split, and soon fall off; the secretions change their character, and a cure is rapidly obtained. A mercurial purge is given every eight days, and the child takes for drink a decoction of the woods. The mean duration of the treatment is from four to five weeks.

30. *Cure for Foul Breath*.—M. CAVARNA has uniformly succeeded in curing by means of the following gargle, the foul breath which arises from a morbid condition of the mouth. He was led to its habitual employment by the complete relief it afforded in a case of foul breath from mercurial salivation. R. sulph. alumin. et potass. ʒij; oq. puræ ʒiv. M. Ft. gargarism.

31. *Influence of Vaccination on Hooping-cough*.—Experiments made at the hospital for children in Paris, tend to show that vaccination exerts no control over the progress of pertussis. Ten children labouring under this disease, who had never been vaccinated, have been admitted into the hospital just named within the last four years, and of these nine were vaccinated. Pustules were regularly developed, but the hooping-cough was in no respect modified by the vaccine disease.—*Bull. Gén. de Thérap.*, 30 July, 1836.

32. *Mercurial Ointment for the cure of Chilblains*.—Dr. DESGRANGES has employed the mercurial ointment for the cure of chilblains with the happiest effects. The parts being first rubbed with the ointment, are then covered with a piece of linen spread with the same. M. G. often weakens the common ointment by adding simple cerate, in the proportion of one or two drachms of the former to an ounce of the latter.—*Journ. de Méd. Pral. ou Recueil des Travaux de la Soc. de Méd. de Bordeaux*.

33. *Tannate of Lead in Gangrenous Sores*.—Dr. TOTT has employed the tannate of lead in several cases of gangrenous sores, with marked advantage. The preparation may be made by pouring a solution of acetate plumbi drop by drop, on a decoction of oak bark, as long as any precipitate forms. The precipitate is then collected and spread on linen, or united with lard in the proportion of two drachms of the former to an ounce of the latter.—*Gaz. Méd.*, Jan. 1837, and *Graefe und Walter's Journal der Chirurgie*, &c. B. xxiv.

34. *Remedial powers of the Aconitum Napellus in Headache*.—W. C. RANLEY in a communication to the *Lancet*, (Sept. 23, 1837), extols the efficacy of the extract of aconite in the cure of nervous headache, especially when it occurs in delicate and nervous persons. The form in which Mr. R. administers the remedy is in pills in doses of one grain repeated every hour until relief is obtained.

35. *Artificial respiration during convulsive fits in children*.—Dr. LAWSON CAPE is of opinion that in the asphyxia that is frequently met with during a convulsive fit in young infants, many a child has been lost,—after the long-suspended act of respiration has ceased entirely—from the attendants limiting their measures to hot baths, frictions, cold water splashings to the face, stimulating applications to the nostrils, &c. &c., when artificial inflation of the lungs, with the alternate expulsion of the air by pressing the chest and abdomen, would have restored the lost

function, and recovered the child. Dr. C. relates the following case, illustrative of his opinion:—"On the 20th March, 1837, an infant in Nottingham Place, five days old, had been in perfect health up to the moment that he was suddenly seized with a most severe attack of convulsions, the cause of which appeared to be the overloading the stomach the preceding evening. The fits began by the muscles of the eyes and face being thrown into violent clonic contractions, producing the most frightful contortions of the features; the pupils were dilated, the whole face and head turgid, as if the veins were going to burst, and of a deep blue, or rather purple, colour. The respiratory muscles next took on the convulsive action, and caused the greatest oppression in the breathing; indeed the respiration was *completely stopped in most of the fits*, and recovered, after a frightful interval, by convulsive gasps and sobs, followed by deep sighs. The other muscles of the body and limbs then followed, and the whole muscular system became involved in the spasm.

Between half-past, 8 A.M., and 9 P.M., the infant had thirteen fits, ranging in duration from a few minutes to three quarters of an hour.

"The main indication in the treatment was to get the bowels to act, and to relieve the pressure on the brain. The child had been put into a hot bath by the nurse, which was repeated during the second attack, without apparent benefit. A leech was applied on the frontal bone, near the fontanelle; half a grain of calomel and a grain and a half of jalap, with a tea-spoonful of castor-oil, were given every four hours, and the lower part of the bowels repeatedly evacuated by injections of soap and water and castor-oil. The strength was kept up by injections of jelly, with a few drops of sal volatile or brandy in them. After the twelfth fit, the bowels acted for the first time from the higher intestines copiously; after which there was only one mild though long seizure, when they entirely ceased; the child went to sleep, and was perfectly well the next day, and has remained so ever since, without the slightest symptom of any return.

"The whole case shows to what extent functional mischief may affect the brain and spinal column, excited by sympathetic irritation, without any inflammation or change of structure, for the fits ceased almost immediately after the operation of the medicine administered by the mouth; as, though the enemata emptied the large intestines, this did not have any effect upon the symptoms, the obstruction seeming to be in the upper portion of the canal.

"The pressure produced upon the brain was such that respiration was entirely suspended during the greater part of the fits, and even the action of the heart could not be felt for more than ten minutes in the third and twelfth fits, and the child lay to all appearance dead. It was at such times that I proceeded to restore the suspended functions by artificially inflating the lungs by breathing into the mouth of the infant from my own, closing the nostrils, and compressing the thorax after each inflation; observing the natural periods of frequency as much as possible. I am quite convinced the child would have been lost, had it not been for the artificial aid thus afforded to nature in the severe struggle, till the offending matter was expelled. By means of the artificial respiration, the colour (especially of the face and lips) turned from purple to red, but still there was no breathing, till a convulsive gasp announced the termination of the fit.

"I am aware that some have recommended a tube to be passed into the larynx, in preference to breathing into the mouth; and also many have objected to the employment of one's own breath, as the expired air is loaded with carbonic acid, and deprived of a portion (though a small one) of its oxygen. The success of the plan I employed, however, is quite sufficient to justify its use, and it is much more easily effected than by means of the tube, which has sometimes seriously injured the soft parts, and is too readily displaced. A purer air would no doubt be more proper, but unless its temperature could also be kept up to that of the human body, we should lose one of its restorative properties, of perhaps as much consequence as the other. In the cases where artificial respiration was kept up in animals under the influence of narcotic poisons, by Sir B. Brodie, as detailed in his Croonian Lectures, the temperature of the air employed was thus artificially elevated; but in the hurry and confusion of a still-born child or a convulsive fit, there is no time to make the necessary preparations. What I would most wish to insist upon, is the necessity of perseverance in such instances; and perhaps the history of the case I have given may induce others to persevere in the same manner to the very last (*lateat scintilla forsitan*;) and thus perhaps, as in this instance, restore an only child to its anxious parents."—*London Med. Gaz.*, Oct. 1837.

36. *Tubercular Leprosy*.—An interesting paper on this subject was read to the Medical Section of the British Association, at their meeting at Liverpool, by Dr. Hancoek, who sojourned many years among the Indians of Guiano:—"The first part of Dr. H.'s paper went to show that the disease in question has been usually confounded with elephantiasis, or what is termed the Barbadoes *leg* and Siam disease; in which the skin and soft parts about the leg and ankle become so enlarged as to bear a close resemblance to the leg and foot of an elephant—a local disease confined to the affected limb, and perfectly distinct from the true *Lepra Arabum*, in which the whole body, or the entire mass of fluids and solids, appears to be implicated.

"In treating of the causes and symptoms of the disease, Dr. Hancoek thought that it obviously consisted in a vitiated condition of the blood and serous fluids; but this appeared to be connected, either as cause or effect, with obstructions of the absorbing and secreting vessels; this, together with a peculiar predisposing diathesis, determines the form of the disease. The obstruction and a faulty secretion produce serous deposits under the skin, forming the tubercles, knobs, or indurations, which soon characterize the disease; in proportion as they increase in number and magnitude, the circulation, with the absorbing, secreting, and depurative processes, become daily more obstructed. The process being slow and gradual, the humour solidifies almost as fast as it transcends. The tubercles are of a copper or leaden colour, and more numerous on the legs and thighs. There is stiffness of the eyelids and thickening of the palpebra: the voice becomes hoarse and nasal, and the respiration more or less affected. Varicose veins and knotty pustules are observed about the root of the tongue; and in the advanced stage the whole countenance becomes distorted, full of knobs and tubercles, and of a hideous aspect. In the last or ulcerative stage, the hairs fall off from the eyelids, eyebrows, chin, and other parts; the toes are swelled, and crack with dry fissures, and the skin becomes quite callous and insensible. A corruption of the whole mass of humours, and general disorganization of the solids, ensue; hectic fever supervenes, and terminates the existence of the miserable sufferer. In some cases a few solitary symptoms will occur, whilst in others many will appear almost simultaneously.

"Dr. Hancoek adduced a variety of arguments to prove the perfect identity of *Lepra Arabum* with the *Radesyge* of Norway, Sweden, and other northern countries. He had been led to investigate this part of the subject from having seen, with surprise, in the 18th volume of the Edinburgh Medical and Surgical Journal, a summary of symptoms drawn up from Holst, Stuwe, and other writers, with the view to prove their non-identity. The objections contained therein were shewn to arise from a misapprehension of the subject, or from an over anxiety to establish certain preconceived opinions. Not only did the whole train of symptoms agree in every particular, but also the general progress of the two diseases, and the morbid changes which take place. Dissections of those who had died of leprosy had not afforded to the writer evidence of such changes in the genital organs, as have been adverted to by certain writers. It was worthy of remark, that the appearances noticed by different authors, in the *Radesyge* of northern Europe, are all occasionally observable in the *Cocobac* of the West Indian colonies, from which it is clear that varieties have been multiplied without reason, or for any practical purpose, but tending only to complicate and create confusion. Dr. H. had, in no instance, known the *Cocobac* (*Lepra Arabum*) to be communicated by the husband to the wife, nor *vice versa*; so that, notwithstanding the prevalent opinion to the contrary, he had long regarded it as void of contagion; yet he was almost induced to think that, under predisposition and other concurring causes, the disease may, in the *ulcerative stage*, be communicated. It seems that *white* persons in the colonies avoid touching a person infected with leprosy; and they generally segregate the lepers on a distinct part of the respective plantations.

"Having briefly stated the results of some post-mortem examinations in the disease, Dr. H. proceeded to detail the methods he had found most effective in its cure. When attended to early, the symptoms were easily arrested by the use of saline laxatives, with antimonials, nodynies, diaphoretics, vapour baths, and frictions; bleeding, spare diet, and the several means for promoting *lymphatic absorption*, and all the secretions, especially by perspiration. The advantage of such means, duly persisted in, was evinced in the relief obtained for the patient, and rendered obvious to others by the foul and fetid miasms evolved, as well as by the exuvie thus thrown

off from the surface of the body. Cases which had occurred during Dr. H.'s practice in Guiana were adduced as illustrative of the advantages obtained over the disease by calling in the united aid of the various remedies.

"As auxiliaries, opium and the *Coonuparu* (the leaves of a plant of the Euphorbiacea family), were found to afford essential aids, along with the alternate use of warm vapour baths and cold effusions,—means which the author has found to be equally beneficial in divers chronic diseases. Moderate bleeding was often found to augment the strength, and gently to facilitate the cure; along with the moderate use of tonics, diaphoretics, and iodine. The sensation of lassitude and debility often depends on hypertrophy or congestion. The morbid growths, or fungoid tubercles, in this disease, are nourished by excess of blood; they resemble those of cancer, and by many they have been considered equally incurable.

"The Indians of Guiana resort to fomentations, baths, and to a drink of the bark of a tree called *Mouca*, with the root of a vine, *Paramarora*—a species of *Cissus*—and the bark of *Waiacono* (guaiacum), the infusion of which is fermented with honey. They use also the bark of the tree '*Tamootu*,' a non-descript. These simple methods of the American natives are likewise of vast efficiency in arresting the most pernicious fevers, dysentery, and a multitude of ailments both acute and chronic."—*Ibid.*

37. *Kreosote in sea sickness*.—Mr. A. B. Mannoek informs the editor of the *Lancet*, that he has given the kreosote as a preventive of sea-sickness, and found it prove almost uniformly successful. Dr. Elliottson has also used the article for the same purpose, and as far as his limited experience went, when he read his paper to the Medico-Chirurgical Society, with advantage. See this Journal, Vol. XVIII., p. 154. It will, indeed, be a valuable discovery, if kreosote shall prove an effectual remedy for the distressing sickness just named.

38. *Tetanus Neonatorum*.—So little has been done to elucidate the nature or treatment of this disease, that the following observations merit attention as being calculated to establish something positive in place of the vague notions which have hitherto prevailed on the subject. They are taken from a memoir by Dr. ROBERT FINCKH, published in *Hecker's Annalen*, (Vol. III., No. 3.) and are founded on the observation of twenty-five cases, which occurred at the Stuttgart Hospital, between the years 1828 and 1835, during which 848 infants were received into that establishment. Of the above twenty-five cases, thirteen were boys and twelve girls. Most of the cases occurred during the cold season.

Commencement of the Disease.—Tetanus neonatorum generally commences during the first week after birth. Thus, of the twenty-five cases only one began on the second day of the child's existence, while eight cases occurred on the fifth day, and seven on the seventh. The *prodromes* of this disease are so uncertain that we shall notice them but in a very brief manner. The child becomes uneasy; is seized with periodical fits of crying, which present a peculiar character; it takes the breast with avidity, but soon lets it go; the action of suckling is performed with difficulty, or is impossible; the intestinal canal is usually more or less deranged.

Symptoms.—As the disease becomes fully developed, the impossibility of suckling is quite marked; this is a very constant sign, and did not fail once in the twenty-five cases. The infant's face assumes a contracted and anxious appearance; the spasm of the muscles, at first insignificant, intermitting, and confined to the muscles of the jaw, becomes more intense, and extends to the muscles of the neck and back; and the spinal column is firmly fixed, or even bent backwards. In this state the child may lay, apparently tranquil, with the respiration a little accelerated, or it may be seized with violent and repeated convulsions. In this latter case the face becomes tumid, and almost black; the mouth is covered with foam; the arms and legs are bent up; the fingers and toes contracted. The spasmodic attacks occur every half or even quarter of an hour, and are brought on by apparently insignificant causes. After the lapse of twelve to twenty-four hours the infant falls into a state of general collapse, and soon dies in complete exhaustion. This latter period is very often marked by febrile symptoms, with burning heat of the back and head, while the extremities are icy-cold. The state of the umbilical cord is one of the circumstances which demands especial attention. In a great majority of cases a coincidence has existed between the separa-

tion of the cord and the developement of the tetanos: thus the cord was separated fourteen times before the appearance of spasms, nine times during, and only twice after, their commencement.

Duration.—The duration of tetanus neonatorum is generally short. In fifteen cases the disease terminated within two days; one case was protracted to a week, two to five days; indeed it is almost incredible how long the tender constitution of the infant will sometimes resist this dreadful malady; thus, Dr. Eläßer saw one single case which did not terminate before the thirty-first day.

Causes.—Dr. Finckh examines them at some length, but we shall only give an analysis of his remarks. It is impossible to refer the disease to any congenital malformation, or weakness of the infant, for all the children were born at the full period, well made, and many of them vigorous. The doctor is inclined to rank, as more immediate causes, the convulsibility of new-born children, and the suppurative or ulceration of the umbilical cord. Amongst occasional causes, the author enumerates atmospheric influence, cold, gastric irritations, mechanical stimuli, and injuries. With respect to the nature of the disease, he considers it to be essentially the same as the traumatic tetanus of adults, and to be produced by a congestive or inflammatory condition of the central nervous system. Tetanus neonatorum is generally considered to be more prevalent in warm climates than in any other; but the observations of Dr. Finckh tend, certainly, to show that any exposure to cold, especially during the cicatrization of the umbilical cord, is apt to determine tetonic symptoms. Thus, children baptised far from home, during a moist, cold season, are often attacked; and, in Germany, physicians have, for a long time, made this interesting remark, that cases of tetanus abound in such districts as are deprived of parish churches, while they are much rarer in towns and villages where the proximity of a church enables parents to have their children readily baptised.

Diagnosis and Prognosis.—The peculiar cry and expression of the face, the trismus, contraction of the limbs and back, and, above all, the coincidence of these symptoms with inflammation or suppurative of the umbilical cord, render the diagnosis of this disease extremely easy. Unfortunately, the prognosis is of a most unfavourable kind. Strong, vigorous children resist somewhat longer than weakly infants, but they all die. This is confirmed by the experience of all writers on this truly terrible disease.

Morbid Appearances.—We shall here repeat, at length, the results of twenty post-mortem observations made by the author. Most of the bodies were examined thirty-six hours after death; several from four to six hours after: and they were all enveloped in linen moistened with vinegar, and placed on the abdomen to prevent the gravitation of the blood.

(*External Appearances.*) The face retained its characteristic appearance of suffering; the muscular system, its rigidity; and the fingers and toes were powerfully contracted. The umbilicus was surrounded by a large circle of a green or bluish-green colour.

(*Spinal Marrow.*) The vertebral canal was opened in every case, and with extreme care. In four cases the spinal marrow and its membranes were free from any alteration. In the remaining sixteen an effusion of blood, in considerable quantity, occupied the whole length of the canal, between the bony walls and the dura mater. This blood was very dark in colour, sometimes fluid, at other times coagulated; in several cases it occupied more particularly a single region, as the cervical or dorsal, for example:—

In nine of the sixteen cases the dura mater and arachnoid were perfectly healthy. The pia mater was evidently inflamed and thickened in nine cases, and in three the portion lying on the posterior surface of the spinal marrow was deeply congested. The substance of the spinal marrow was firm and normal in the nine cases accompanied by inflammation of its membranes; in the seven remaining, an effusion of blood, or of a serous or gelatinous fluid, occupied the vertebral canal.

(*Cranium.*) In only one case were the contents of this cavity found exempt from alteration. In the other cases more or less extravasated blood existed at the surface, or in the interior of the brain. Thus, the effused blood was found:—

5 times on the surface of the brain.

5 — in the plexus.

3 times in the lateral ventricles.

2 — under the perierianim.

1 — at the surface of the cerebellum.

1 — below the teutorium cerebelli.

1 — above the teutorium. Here the forceps had been used.

The membranes of the brain were healthy, it we except more or less injection of their vessels. In one case on effusion of gelatinous fluid, instead of blood, was found between the arachnoid and pia mater. The substance of the brain, though commonly a little soft, offered nothing abnormal; in two cases, however, it was very hard, while the cerebellum was in a state of complete softening.

(*Thorax and Abdomen.*) The viscera contained in these cavities, presented nothing worthy of notice. The lungs and heart were commonly quite healthy. On opening the abdomen, the stomach and intestines were also found in a normal state; however, in five cases, some one portion of the intestinal tube was strongly contracted, while the rest was much distended with gas. The umbilical arteries and veins were carefully examined in eleven cases, without any trace of inflammation or other lesion being discovered. The various nerves and their plexus were also healthy.

Treatment.—This was exceedingly varied. In most cases the antiphlogistic method was tried, but all the children died, even when it was employed with vigour from the very outset. The symptoms were alleviated for a short time by lukewarm baths; but whenever blood was abstracted, even locally and in small quantity, they were evidently aggravated. About a dozen cases were treated, ineffectually, with musk, opium, and other antispasmodics. In one case, however, the use of these remedies seemed to protract the disease to the thirty-first day.—*Lancet*, August 12th, 1837.

39. *On the remedial powers of Turpentine in Nervous Irritation.*—Professor R. J. GRAVES asserts that turpentine exercises a very remarkable influence over many forms of nervous irritation. In many affections of the nervous system characterized by excitement, he says that he has employed turpentine with the most signal benefit. "Thus," he adds, "we frequently find it a most valuable agent in the treatment of chorea, of epilepsy, and of the convulsive fits of children. We have frequently experienced benefit from its use in the treatment of spasmodic affections of the stomach and bowels; in hysteria, tympanitis, and the subsultus of fever, we often derive from it the most rapid and effectual relief. You recollect a case of typhus which was lately under treatment in our wards, and of which one of the most prominent symptoms was general and continued subsultus; and you have all witnessed how much relief the patient obtained from small doses of oil of turpentine. Hence I was led to conclude that it might be employed with benefit in the latter stages of fever, where vascular excitement is greatly abated, and where the most prominent symptoms are irritation of the nervous centres, with more or less coagulation of the gastro-intestinal mucous membrane."—*London Med. Gaz.*, June 17th, 1837.

SURGICAL PATHOLOGY AND OPERATIVE SURGERY.

40. *Toothache from Caries.*—TROSCHEL has followed up some observations made by him last year in a Prussian medical journal, in which he endeavoured to prove that the violent pain which occurs in caries of teeth is not caused by the laying bare of the nerve; and that caries, if unaccompanied by any other ailment, is in most cases free from pain. There are exceptions, however, to this rule which are not uncommon.

We find ordinarily two or more carious teeth together, of which very often one gives great pain, and the others, which are much more injured, and in an apparently worse condition, give no pain. Despite of all palliatives, and all possible attention to the avoidance of cold, the pain often lasts whole weeks, with increasing or decreasing violence; there is congestion and repeated swelling of the face, sleep and appetite are banished, and even the good constitution of the sufferer